

Transcript of all audio clips in the story map, “A ‘new normal’ for west-side fire”

Rising temperatures audio clip: Over the next 50 to 100 years, we’re expecting that temperatures will continue to warm in the Pacific Northwest. So by the middle of the century, we’re looking at about a 3.5 to 4.5 °F increase in temperature. And then by the end of the century, we’re looking at about a 5 to 8.5 °F increase in temperature. But, of course, this depends on future emissions, which is partly going to be how society reacts and reduces emissions over time or not. So, we expect the temperature increases to occur in all seasons, but they’ll be slightly higher in summertime. And there will definitely be more extremes in heat.

Different rainfall patterns audio clip: The models project for the Northwest anywhere from a decrease of about 3 percent in average annual precipitation to an increase of about 13.5 percent. On average, they are projecting about a 3 percent increase. Most of the increases are likely to be in the wintertime and a lot of models project a slight decrease in our already dry summers. So this could mean we have even less water in the summer in the future, and more water in the winter when we already have a lot of precipitation. But all models do agree there is likely to be an increase in extreme precipitation events—in events where over an inch of rainfall occurs. So we will see more extreme precipitation events and a longer period of time between those precipitation events.

Reduced snowpack audio clip: And at the same time when we have not enough water in the summer, we’re likely to have too much water in the winter. So when precipitation falls as rain rather than snow, there’s no snowpack to hold that water in the winter. So with more winter rainfall, more extreme precipitation events, likely you’ll see more flooding and more damage to infrastructure and our roads in the future.

Drought audio clip: We are starting to see more drought events here in the Northwest with climate change. And again we expect that drought events will be more severe and longer in duration in the future. Last summer, the state of Oregon was in drought for most of the summer. We had a couple other notable drought events in the last 5 to 10 years. One of them was [in] 2015. And that year was interesting because we actually had near normal precipitation for the year for the winter, but almost all of that precipitation was rain instead of snow because it was quite warm. And then that winter was followed by a very dry spring and summer and we had extensive fires that year. And what we’re expecting is conditions like [those in] 2015 to be more frequent in the future. So we’re expecting to have more years like 2015 in the future with climate change.

Invasive species and disease audio clip: And although we’ve always had insect outbreaks, we have seen some very large insect outbreaks and that’s likely because trees are more stressed by increased temperatures and lower water availability. It makes them more susceptible to insect attacks and mortality.

Fire audio clip: ...and so with warmer and drier conditions in the future, we're expecting that fuels are going to dry out, fire seasons will be longer, and that we'll see more area burned by fire every year. And so the projections are up to two to three times the annual area burned. And with those fire events comes more smoke.